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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 November 2008</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-12,14,16 and 18-37</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-12, 14, 16 and 18-37</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-12, 14, 16 and 18-37 are pending this application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   **Claims 32-37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

    Claim 32 is directed to a "computer system". The body/structure of the claim indicates the "computer system" includes "a non-Java application", "a means for", "an EJBServlet" and "a remote method interface" all of which are software per se. A computer system comprising "a non-Java application", "a means for", "an EJBServlet" and "a remote method interface" is therefore not a process, a machine, a manufacture or a composition of matter and as such not directed to statutory subject matter.

    Also of note is that it is not clear as to whether Applicant is invoking 112 6th. protection in using the term "means for". If Applicant is invoking 112 6th. protection all the elements in the body/structure should include the term "means for".

    In contrast, a claimed "computer storage medium encoded with instructions that when executed by a processor provides:" is a computer element with defined structural

and functional interrelationships. The structural and functional interrelationship allows

the claim to be classified as a machine, the functionality realized and thus statutory.

Accordingly, appropriate correction or amendment is required (NOTE: computer storage

medium must be directed to storage medium **only** and not transmission medium or

carrier wave).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-10, 12, 16, 18-20 and 31-37 are rejected under 35 U.S.C. 103(a) as

being unpatentable over U.S. Pub. No. 7,047,525 B2 issued to Prunty et al. in view

of U.S. Pat. No. 6,836,889 B1 issued to Chan et al.

4.   As to claim 1, Prunty teaches a method of accessing an Enterprise Java Bean

(EJB) ("…bean…" Col. 6 Ln. 15 – 17) by a non-Java application within a computing

environment (figure 2 Col. 5 Ln. 9 – 33), comprising:

a) making a call, by the non-Java application (IIS/NT/COM Component 202), to a

client library (Request Component 214), wherein the call includes input parameters

("…request…" Col. 5 Ln. 9 – 14, Step 902 Col. 5 Ln. 36 – 37, Ln. 64 – 65,

"…MtdGetXML…" Col. 6 Ln. 15 – 29, "…MtdPostRequests method…" Col. 7 Ln. 4 –

10);

      b) invoking a function within the client library to construct an HTTP request

corresponding to the input parameters of the call from the non-Java application, wherein

numeric primitive data type of the non-Java application in the calling input parameters

are converted into a corresponding text representation in the HTTP request ("…request

is translated…(e.g., XML) (step 904)…" Col. 5 Ln. 34 – 39, "…InteropRequest class…"

Col. 6 Ln. 9 – 42, "…MtdGetXML…" Col. 6 Ln. 15 – 29, "…MtdPostRequests method…"

Col. 7 Ln. 4 – 10, Step 518 Col. 8 Ln. 23 – 28);

      c) passing the HTTP request from the client library to an EjbServlet

(Transmission Component 212 Col. 5 Ln. 18 – 20, Step 906 Col. 5 Ln. 40 – 41);

      d) invoking a method on an EJB by the EjbServlet based upon the HTTP request

(Step 406 Col. 7 Ln. 58 – 60);

      e) returning information from the invoked method from the EJB to the EjbServlet

(Step 410 Col. 7 Ln. 60 – 62);

      f) decoding the returned information into an HTTP response string by the

EjbServlet (Step 412 Col. 7 Ln. 62 – 64);

      and

      g) transmitting the HTTP response from the EjbServlet to the client library

("…translate the response…" Col. 5 Ln. 23 – 33, "…XMLResponse…" Col. 6 Ln. 15 –

22, Step 413 Col. 7 Ln. 64 – 65).

h) parsing and converting the HTTP response by the client library into return information compatible with the non-Java application and then passing the return information from the client library to the non-Java application, wherein text-represented numeric values extracted from the HTTP response are converted into a corresponding numeric primitive data type of the non-Java application ("…parsed…" Col. 6 Ln. 49 – 51, Col. 7 Ln. 65 – 67, Steps 530/542 Col. 8 Ln. 38 – 52).

Prunty is silent with reference to the client library being a linkable library that is dynamically linked to the non-Java application.

Chan teaches the client library being a linkable library that is dynamically linked to the non-Java application (Access Bean 310/Access Bean 350 Col. 6 Ln. 54 – 67, Col. 7 Ln. 1 – 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Prunty with the teaching of Chan because the teaching of Chan would improve the system of Prunty by allowing set of routines or library to be loaded and unloaded at runtime on request and used by multiple programs at the same time.

5.   As to claim 2, Prunty teaches the method of claim 1 wherein the invoked method is a chained method (Step 406 Col. 7 Ln. 58 – 60).

6.   As to claim 3, Prunty teaches the method of claim 1 wherein the invoking a

method on the EJB by the EjbServlet further comprises passing one or more input

parameters by the EjbServlet to the EJB (Step 406 Col. 7 Ln. 58 – 60).

7.   As to claim 4, Prunty teaches the method of claim 3 wherein the input

parameters comprise one or more input objects constructed by the EjbServlet based on

the HTTP request (Step 406 Col. 7 Ln. 58 – 60).

8.   As to claim 5, Prunty teaches the method of claim 1 wherein the returning

information from the invoked method from the EJB to the EjbServlet further comprises

the EJB constructing a return object based upon the information form the invoked

method and passing the return object to the EjbServlet (Step 410 Col. 7 Ln. 60 – 62).

9.   As to claim 6, Prunty teaches the method of claim 5 wherein the return object is

a chained object (Steps 406-413 Col. 7 Ln. 58 – 67).

10.   As to claim 7, Prunty teaches the method of claim 5 wherein the decoding the

returned information into an HTTP response string by the EjbServlet further comprises

decoding the return object into an HTTP response string by the EjbServlet (Step 412

Col. 7 Ln. 62 – 64).

11.   As to claim 8, Prunty teaches the method of claim 1 wherein the HTTP request

and the HTTP response each comprise a series of bytes representing HTTP-specific

control information or text strings ("…XML messages…" Col. 5 Ln. 58 – 61, Col. 6 Ln. 9

– 14, Ln. 45 – 58, Col. 7 Ln. 4 – 10, "…XML response…" Col. 8 Ln. 35 – 41).

12.   As to claim 9, Prunty teaches the method of claim 8 wherein the HTTP request

and the HTTP response are passed between the client library and the EjbServlet via an

HTTP protocol ("…HTTP or HTTPS…" Col. 5 Ln. 58 – 61, Col. 6 Ln. 45 – 48).

13.   As to claim 10, Prunty teaches the method of claim 9 wherein the HTTP protocol

enables the client library and EjbServlet to communicate across a distributed computing

environment ("…HTTP or HTTPS…" Col. 5 Ln. 58 – 61, Col. 6 Ln. 45 – 48).

14.   As to claim 12, Prunty teaches the method of claim 1 further comprising the non-

Java application allocating buffers to hold calling input parameters sent to the client

library and return information received from the client library ("…InteropParameter

class…(input or output) of the parameter…" Col. 6 Ln. 30 – 37).

15.   As to claim 16, Prunty teaches the method of claim 12 further comprising the

client library extracting the return information from the HTTP response sent by the

EjbServlet and placing the return information into the buffers provided by the calling

application (Step 530 Col. 8 Ln. 35 – 41).

16.   As to claim 18, Prunty teaches the method of claim 1 wherein the EjbServlet and

the method invoked on the EJB is identified by a calling input parameter embedded in

the HTTP request ("...request...input/output parameters..." Col. 5 Ln. 64 – 65,

"...InteropParameter class...(input or output) of the parameter..." Col. 6 Ln. 30 – 37)).

17.   As to claim 19, Although Chan does not explicitly teach the method of claim 1

wherein the method is invoked via a remote method invocation (RMI) protocol, it does

teach multiple Java Virtual Machines (JVM) communicating and as such Remote

Method Invocation RMI would be inherent since Remote Method Invocation (RMI)

facilitates object function calls between Java Virtual Machines (JVMs).

18.   As to claim 20, Although Chan does not explicitly teach the method of claim 19

wherein the RMI enables the EjbServlet and the EJB to communicate across a

distributed computing environment, it does teach multiple Java Virtual Machines (JVM)

communicating in a distributed fashion and as such Remote Method Invocation RMI

would be inherent since Remote Method Invocation (RMI) facilitates object function calls

between Java Virtual Machines (JVMs).

19.   As to claim 31, Chan teaches the method of claim 1 further comprising invoking a

logging function within the client library (Cache 340 Col. 7 Ln. 5 – 6).

20.   As to claims 32, 36 and 37, see the rejection of claim 1 above.

21.   As to claims 33-35, see the rejection of claims 3, 5 and 8 respectively.

22.   Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Pub. No. 7,047,525 B2 issued to Prunty et al. in view of U.S. Pat. No.

6,836,889 B1 issued to Chan et al. as applied to claim 1 above, and further in view

of U.S. Pub. No. 2002/0120697 A1 to Generous et al.

23.   As to claim 11, Chan and Prunty are silent with respect to the method of claim 1

wherein the non-Java application is based on a programming environment capable of

calling external library functions via the C calling convention ("…Visual C++…C#

language…" page 4 paragraph 004, page 8 paragraph 0174).

      Generous teaches the method of claim 1 wherein the non-Java application is

based on a programming environment capable of calling external library functions via

the C calling convention ("…C…" page 27 paragraph 1073).

      It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the system of Chan and Prunty with the teaching of

Generous because the teaching of Generous would improve the system of Chan and

Prunty by providing a general-purpose programming language with high-level and low-

level capabilities and functionalities, including being statically typed, free-formed, multi-

paradigm, usually compiled language and supporting procedural programming, data abstraction, object-oriented and generic programming.

24.   As to claim 14, Generous teaches the method of claim 1 wherein the calls between the client library and the non-Java application are based upon the C language calling convention ("…C…" page 27 paragraph 1073).

25.   Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 7,047,525 B2 issued to Prunty et al. in view of U.S. Pat. No. 6,836,889 B1 issued to Chan et al. as applied to claim 12 above, and further in view of U.S. Pub. No. 20020199032 A1 to Seidman et al.

26.   As to claim 21, Chan and Prunty are silent with reference to the method of claim 12 wherein the return information is placed into two buffers.

        Seidman teaches the method of claim 12 wherein the return information is placed into two buffers ("…response components…deployment descriptor text file…" page 3 paragraph 0024, "…output values…" page 4 paragraph 0030, "…return value, the deployment descriptor…" page 5 paragraph 0037).

        It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Chan and Prunty with the teaching of Seidman because the teaching of Seidman would improve the system of Chan and

Prunty providing a region of memory used to temporarily hold data while it is being

moved from one place to another.

27.   As to claim 22, Seidman teaches the method of claim 21 wherein the buffers

comprise a data buffer and a format buffer, wherein the data buffer comprises an

information text string comprising a text representation of returned information from the

invoked method ("…response components…" page 3 paragraph 0024, "…output

values…" page 4 paragraph 0030, "…return value…" page 5 paragraph 0037), the

format buffer comprises a format text string comprising format information about the

returned information, and the format text string comprises tags that comprises a name

field, a start position field, and length field used to locate data values in the information

text string (deployment descriptor text file…" page 3 paragraph 0024, "…the deployment

descriptor…" page 5 paragraph 0037).

28.   Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Pub. No. 7,047,525 B2 issued to Prunty et al. in view of U.S. Pat. No. 6,836,889 B1

issued to Chan et al. and further in view of U.S. Pub. No. 20020199032 A1 to

Seidman et al. as applied to claim 22 above, and further in view of U.S. Pub. No.

20030167355 A1 to Smith et al.

29.   As to claim 23, Seidman, Chan and Prunty are silent with reference to the

method of claim 22 further comprising passing additional decoded return information

wherein the information from the invoked method exceeds the data buffer capacity, the

format buffer capacity, or both.

Smith teaches the method of claim 22 further comprising passing additional

decoded return information wherein the information from the invoked method exceeds

the data buffer capacity, the format buffer capacity, or both ("...buffer is full..."

paragraph 6326).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the system of Seidman, Chan and Prunty with the

teaching of Smith because the teaching of Smith would improve the system of Seidman,

Hershberg, Chan and Prunty providing a region of memory used to temporarily hold

data while it is being moved from one place to another.

30.   Claims 24 and 27-30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Pub. No. 7,047,525 B2 issued to Prunty et al. in view of

U.S. Pat. No. 6,836,889 B1 issued to Chan et al. and further in view of U.S. Pub.

No. 20020199032 A1 to Seidman et al. and further in view of U.S. Pub. No.

20030167355 A1 to Smith et al. as applied to claim 23 above, and further in view of

U.S. Pub. No. 2006/0036448 A1 to Haynie et al.

31.   As to claim 24, Smith, Seidman, Chan and Prunty are silent with reference to the

method of claim 23 wherein the EjbServlet stores the remaining decoded EJB method

call results in memory.

Haynie teaches the method of claim 23 wherein the EjbServlet stores the
remaining decoded EJB method call results in memory ("...caching..." page 11
paragraph 0149).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to modify the system of Smith, Seidman, Chan and Prunty with the
teaching of Haynie because the teaching of Haynie would improve the system of Smith,
Seidman, Chan and Prunty by providing a temporary storage area where frequently
accessed data can be stored for rapid access.

32.   As to claim 27, Haynie teaches the method of claim 23 wherein the EjbServlet
passes a key to the client library identifying any information from the invoked method
remaining in the EjbServlet ("...object ID parameter..." page 11 paragraph 0149).

33.   As to claim 28, Haynie teaches the method of claim 27 wherein the client library
places the key in a session ID parameter ("...object ID parameter..." page 11 paragraph
0149).

34.   As to claim 29, Haynie teaches the method of claim 28 wherein the client library
provides the key to the non-Java application ("...object ID parameter..." page 11
paragraph 0149).

35.   As to claim 30, Haynie teaches the method of claim 29 wherein non-Java

application accesses the information from the invoked method remaining in the

EjbServlet using the key ("...object ID parameter..." page 11 paragraph 0149).

36.   Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Pub. No. 7,047,525 B2 issued to Prunty et al. in view of U.S. Pat. No.

6,836,889 B1 issued to Chan et al. and further in view of U.S. Pub. No.

20020199032 A1 to Seidman et al. and further in view of U.S. Pub. No.

20030167355 A1 to Smith et al. as applied to claim 23 above, and further in view of

U.S. Pat. No. 5,948,066 issued to Whalen et al.

37.   As to claim 25, Smith, Seidman, Chan and Prunty are silent with reference to the

method of claim 23 wherein the client library passes a return code to the non-Java

application indicating that information from the invoked method remains in the

EjbServlet.

        Whalen teaches the method of claim 23 wherein the client library passes a return

code to the non-Java application indicating that information from the invoked method

remains in the EjbServlet ("...one or more status code..." Col. 5 Ln. 16 – 41).

        It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the system of Smith, Seidman, Chan and Prunty with the

teaching of Whalen because the teaching of Whalen would improve the system of

Smith, Seidman, Chan and Prunty providing a technique intended to give a short textual

description of the status of a response to a HTTP request.

38.   As to claim 26, Whalen teaches the method of claim 23 wherein additional return

data and format strings are passed until all of the decoded information from the invoked

method is received by the application ("...dependent resources..." Col. 5 Ln. 16 – 35).

Response to Arguments

Applicant's arguments with respect to claims 1-12, 14, 16 and 18-37 have been

considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

U.S. Pub. No. 2002/0147962 A1 to Hatanaka et al.: directed to method and

system for incorporating legacy applications into a distributed data processing

environment.

U.S. Pub. No. 2003/0163450 A1 to Borenstein et al.: directed to brokering

semantics between web services.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Charles E. Anya whose telephone number is 571-272-

3757. The examiner can normally be reached on 8:30-5:00.

   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

   Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cea.

/Li B. Zhen/
Primary Examiner, Art Unit 2194